



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,227	09/10/2003	Hiroshi Iwakami	14470.0004US01	7711

23552 7590 04/26/2005
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

BASINGER, SHERMAN D

ART UNIT PAPER NUMBER

3617

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,227

Applicant(s)

IWAKAMI ET AL.

Examiner

Sherman D. Basinger

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: in claim 1 line 13 "a push-pull converter" should be –the push-pull converter- or –said push-pull converter-. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kishi et al newly cited.

Kobayashi discloses a trim operating wire structure for a personal watercraft comprising a jet propeller for ejecting jet water,

a nozzle (thrust bucket 27 is considered to be one type of nozzle) in position to adjust and capable of adjusting the direction of the jet water,

a trim operating lever 32 operably connected to a steering handle 22,

the nozzle 27 being vertically rotatable from a first ordinary direction when the trim

Art Unit: 3617

operating lever is gripped, and returning due to spring 44 to the first ordinary direction

when the grip on the trim

operating lever is released,

a pull wire 34,

a push wire 30, the push wire long in a rectilinear form as is shown in figure 2 (note that applicant's push wire actually curves in a vertical plane, so it isn't rectilinear in this plane), and

a push-pull converter 36,

wherein a first end of the pull wire is connected to the trim operating lever and a second end of the pull wire is connected to a first end of the push wire through a push-pull converter and

wherein a second end of the push wire is connected to the nozzle.

Kobayashi does not disclose wherein the pull wire has a smaller diameter and is more flexible than the push wire. However, Kishi et al shows in figure 9 that the pull wires 38 and 39 are of smaller diameter than the push wire 76 and are more flexible. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the pull wire of Kobayashi smaller and more flexible than the push wire. Motivation to do so is that the pull wire takes a route which has more curvature than the push wire and thus would be better suited for this if made smaller and more flexible.

Kobayashi et al also does not disclose that wherein the push-pull converter is disposed in the personal watercraft directly under the

Art Unit: 3617

steering handle or on the bow side of the steering handle. Kishi et al discloses that the converter 72 is on the bow side of the steering handle. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to locate the converter of Kobayashi in the area where the converter of Kishi et al is located, that is, on the bow side of the steering handle.

Motivation to do so is to locate the converter on an underside of a hatch cover, so that the converter pivots with the hatch cover for convenience of repair.

Figure 2 of Kobayashi clearly shows the pull wire as having a portion disposed on the inside of a cover which covers the inner portions of the handles.

It is unclear from Kobayashi if the pull wire is shorter than the push wire; however, Kishi et al shows in figure 1 the pull wire as being shorter than the push wire. In view of the teaching of Kishi et al, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the pull wire shorter than the push wire in Kobayashi. Motivation to do so is to have the more flexible pull wire be of a less length because of its flexibility.

Kobayashi does not disclose the pull and push wires being of stainless steel; however, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make them of stainless steel. Motivation to do so is that stainless steel is less likely to rust.

Allowable Subject Matter

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments for the most part with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection. However, claim 3 is indicated as containing allowable subject matter in view of the arguments presented in the response filed March 17, 2005, page 7, third and fourth full paragraphs.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsuchiya et al is cited as it is a copending application with the same filing date as the instant application and showing the same trim operating wire structure.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone

Art Unit: 3617

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sherman D. Basinger
Primary Examiner
Art Unit 3617
4/15/05

Tuesday, April 19, 2005